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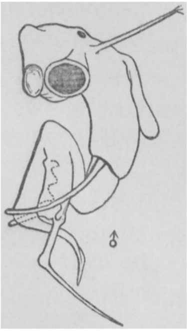
DESCRIPTION OF A NEW BRANCHIPOD.

BY JOHN A. RYDER.

Upon examining a pair of Branchipods which were kindly handed me by Mr. D. S. Holman, and which had been collected near Woodbury, N. J., I find them to be a form hitherto undescribed. I accordingly propose a name for the species.

Streptocephalus sealii, nov. sp.

In form and size this species resembles *S. torvicornis*, Waga, but the third joint of the second antenna differs from that species in the details of its structure, and the ovigerous sacs of the females are not blue as in Waga's animal. The inner branch of the terminal joint of the male claspers is the shortest instead of the longest, as in *S. torvicornis;* at the interior anterior margin of the short branch, there are two unequal lobes, extending forwards and lying flat against the laminar posterior border of the anterior branch; at the lower posterior angle of this lamina, or blade of the forward branch, there is a well-marked, somewhat falcate process, which fits between the lower lobular process of the posterior branch and its scythe-shaped lower extremity. The anterior branch then crosses the posterior at nearly right angles, and for about a third of its length maintains a pretty uniform thickness, and is straight, when it suddenly swells and bends forwards, and as suddenly contracts, and tapers for its remaining two-thirds, ending in a slender, slightly-curved, pointed extremity. The first joint is long and robust, and from its apex externally, the cylindrical, curved, antenniform organ arises, which is about as long as the filiform first antennæ. The second joint is very tortuous, and is strongly bent and twisted upon itself. The third joint, which bears the complex terminal appendages, is wide; the appendages close against each other like the blades of a scissors, whilst the processes of their opposing margins interlock as has been already described, and as can be fully understood by reference to



the accompanying cut of the head of the male. The front of the head is prolonged into a straight beak, which hangs down nearly vertically between the first joints of the claspers, and is flattened antero-posteriorly, and emarginate at its tip. The antenniform appendage is much longer than in *S. texanus*, Packard, whilst the terminal branches of the claspers are widely different from those of that species in their shape and relative proportions. The male organs are very feebly armed with a few short spines, and are nearly straight.

The cephalic horns of the female are twisted upon themselves, slightly bent and flattened at their extremities, which are fringed with short hairs. The large lateral, ovoid, pedunculate, apparently glandular organs behind the eyes, are the same in size and shape in both sexes. The ovigerous sacs are large, nearly half as long as the abdomen, conical in form, and contain a great number of ochraceous eggs, more numerous and much smaller than those of *Chirocephalus holmanii* from the same locality. The male is of a beautiful green, deeper about the head, as though saturated with acetate of copper; the female, on the other hand, is yellow with a tinge of green, verging to brownish in parts, and is very nearly of the same size as the male, if not a little larger. This similarity in the size of the sexes, with a tendency in the females to be largest, is observed only in *S. torvicornis*, as far as I am aware. The two rather long, plumose, tapering branches of the tail are red in both sexes, but of a much brighter red in the female; more slender in the male. Length 27 mm.

I name the species for Mr. W. P. Seal, who collected the first typical specimens; the same gentleman has since furnished me with an additional supply of examples.

The known species of this genus are accordingly as follows:—

Streptocephalus torvicornis, Waga, ♂ 1 inch, ♀ about 14 lin., Warsaw, Poland.

S. cafer, Lovén, 15 mm. long, Cape of Good Hope.

S. similis, Baird, ♂ 8 lin., ♀ 6 lin. long, St. Domingo.

S. texanus, Packard, ♂ .65 in., ♀ .55 in. long, Texas.

S. watsonii, Packard, ♂ 16 mm., ♀ 12–18 mm., Ellis, Kansas.

S. sealii, Ryder, 27 mm. long, New Jersey.

All of the species are found in fresh water.

The distribution of the species of the foregoing genus, and the resemblance existing in some features between the Polish and New

Jersey species is very remarkable. Why such a resemblance should exist between two fresh-water crustaceans separated from each other by a salt ocean 3000 miles wide, and nearly a thousand miles of land besides, is a problem yet to be solved by chorologists and biologists. Indeed, the distribution of both branchipods and phyllopods in general, is not a little singular, and all those who have the opportunity of acquiring any data in regard to the subject should be careful to put them on record.